The Case Against Immunizatons

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For the past ten years or so I have felt a deep and growing compunction against giving routine immunizations to children. It began with the fundamental belief that people have the right to make that choice for themselves. Soon I found I could no longer bring myself to give the injections even when the parents asked me to.

At bottom, I have always felt that the attempt to eradicate entire microbial species from the biosphere must inevitably upset the balance of Nature in fundamental ways that we can barely imagine. Such concerns loom ever larger as new vaccines continue to be developed for no better reason than that we have the technical capacity to make them, thus demonstrating our right and power as a civilization to manipulate the evolutionary process itself.

Purely from the viewpoint of our own species, even if we could be sure that the vaccines were harmless, the fact remains that they are *compulsory,* that all children are required to undergo them regardless of individual susceptibility, to say nothing of the wishes of the parents or the children themselves.

Most people can readily accept the fact that at times certain laws are necessary for the public good that some of us strongly disagree with, but the issue in this case involves the wholesale introduction of foreign proteins or even live viruses into the bloodstream of entire populations. For that reason alone, the public is surely entitled to convincing proof, beyond any reasonable doubt, that artificial immunization is in fact a safe and effective procedure in no way injurious to health, and that the threat of the corresponding natural disease remains sufficiently clear and urgent to warrant vaccinating everyone, even against their will if necessary.

Unfortunately, convincing proof of safety and efficacy has never been given; and, even if it could be, continuing to employ vaccines that are no longer prevalent or no longer dangerous hardly qualifies as an emergency. Finally, even if such an emergency did exist and artificial immunization could be shown to be an appropriate response to it, the decision to vaccinate would remain essentially a political one, involving issues of public health and safety that are far too important to be settled by any purely scientific or technical criteria, or indeed by *any* criteria less authoritative than the clearly articulated sense of the community that is about to be subjected to it.

For all of these reasons, I want to present the case against routine immunization as clearly and forcefully as I can. What I have to say is as yet not quite a formal theory capable of rigorous proof or disproof, but simply an attempt to explain my own experience, a nexus of interrelated facts, observations, reflections, and hypotheses that are more or less coherent and, taken together, make intuitive sense to me. I offer them to the public because the growing refusal of parents to vaccinate their children is seldom articulated or taken seriously. The truth is that we have been taught to accept vaccination as a kind of sacrament of our loyal participation in the unrestricted growth of scientific and industrial technology, utterly heedless of the long-term consequences to the health of our own species, let alone to the balance of

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Nature as a whole. For that reason alone, the other side of the case urgently needs to be heard.

Are the Vaccines Effective?

There is widespread agreement that the time period since the common vaccines were introduced has seen a remarkable decline in the incidence and severity of the natural diseases corresponding to them. But the facile assumption that the decline is also *attributable* to them remains unproven, and continues to be questioned by eminent authorities in the field. With whooping cough, for instance, both the incidence and severity had already begun to decline precipitously long before the vaccine was introduced, [note 1] a fact which led the epidemiologist C. C. Dauer to remark, as far back as 1943:

> If mortality [from pertussis] continues to decline at the same rate during the next fifteen years [as in the last fifteen], it will be extremely difficult to show statistically that [pertussis vaccination] had any effect in reducing mortality from whooping cough. [note 2]

Much the same is true not only of diphtheria and tetanus. but of TB, cholera, typhoid, and other common scourges of a bygone era, which negan to disappear rapidly at the end of the nineteenth century, doubtless partly in response to improvements in sanitation and public health, but in any case long before antibiotics, vaccines, or any specific medical initiatives to combat them. [note 3] Similar reflections prompted the celebrated microbiologist René Dubos to observe that microbial diseases have their own natural history, with or without drugs and vaccines, in which symbiosis and asymptomatic infections are far more common than overt disease:

> It is barely recognized but nevertheless true that animals and plants as well as men can live peacefully with their most notorious enemies. The world is obsessed by the fact that poliomyelitis can kill or maim several thousand unfortunate victims every year. But more extraordinary is the fact that millions upon millions of young people become infected by polio viruses yet suffer no harm from the infection. The dramatic episodes of conflict between men and microbes are what strike the mind. What is less readily apprehended is the more common fact that infection can occur without producing disease. [note 4]

The principal evidence that the vaccines are effective dates from the more recent period, during which the dreaded polio epidemics of the 1940's and 1950's have never reappeared in the developed countries, and measles, mumps, and rubella, which even a generation ago were among the commonest diseases of childhood, have become far less prevalent in their classic acute forms since the MMR vaccine was introduced into common use.

But *how* the vaccines have accomplished these changes is not nearly as well understood as most people assume it is. The disturbing possibility that they act in some other way than by producing a genuine immunity is suggested by the fact that the diseases in question have continued to break even in highly vaccinated populations, and that in such cases the observed differences in incidence and

severity have often been far less dramatic than expected, and in some cases not measurably significant at all.

In a recent British outbreak of whooping cough, for example, even fully vaccinated children contracted the disease in substantial numbers, and the rate of serious or fatal complications was reduced only slightly. [note 5] In another pertussis outbreak, 46 of the 85 fully vaccinated kids studied eventually came down with the disease. [note 6] In 1977, 34 cases of measles were reported on the campus of UCLA in a student population that was 91% "immune," according to careful serological testing. [note 7] In Pecos, New Mexico, during a period of a few months in 1981, 15 out of 20 reported cases of measles had been vaccinated, some of them quite recently. [note 8] A recent survey of sixth-graders in a fully-vaccinated urban community demonstrated that about 15% of this age group are still susceptible to rubella, a figure essentially identical with that of the pre-vaccine era. [note 9] Finally, although the yearly incidence of measles in the U. S. has fallen sharply from about 400,000 cases in the early 1960's to about 30,000 cases by 1974-76, the death rate remained exactly the same; [note 10] and, with the peak incidence now in adolescents and young adults, the risk of pneumonia and liver enzyme abnormalities has risen to 3% and 20%, respectively. [note 11]

The usual way to explain these discrepancies is simply to concede that vaccines confer only partial or temporary immunity, which sounds reasonable enough, since they consist either of live viruses rendered less virulent by serial passage in tissue culture, or bacteria or bacterial proteins that have been killed or denatured by heat, such that they can still elicit an antibody response but no longer initiate the full-blown acute disease. Because the vaccine is therefore a "trick," simulating the true or natural immune response developed in the course of the actual disease, it is certainly plausible to expect that such artificial immunity will tend to wear off rather easily, and perhaps even require additional booster doses at intervals throughout life to maintain optimal effectiveness.

But such an explanation would itself be disturbing enough for most people. Indeed, the basic fallacy inherent in it is painfully evident in the fact that there is no way to predict how long this partial or temporary immunity will last in any given individual, or how often it will need to be restimulated, because the answers to these questions clearly depend on the same mysterious variables that would have determined whether and how severely the same person, unvaccinated, would have contracted the disease in the first place.

In any case, a number of other observations argue just as strongly that this explanation cannot be the correct one. First, it has been clearly shown that when children vaccinated against the measles again become susceptible to it, booster doses have little or no effect. [note 12] Moreover, in addition to producing pale or mild copies of the natural disease, nearly all vaccines also produce a variety of symptoms and ailments of their own, some of them more serious, involving deeper structures, more vital organs, showing less tendency to resolve spontaneously, and often more difficult to recognize as well.

Thus in a recent outbreak of the mumps in supposedly immune schoolchildren, several patients developed unusual symptoms such as vomiting, anorexia, and erythematous rashes without parotid involvement, and the diagnosis required extensive serological testing to exclude other diseases. [note 13] The syndrome

known as "atypical measles" is just as vague and covers a sufficiently broad spectrum to be easily confused with other infections or missed altogether, [note 14] even when it is thought of, and even though the illness may be considerably worse than the wild type, with severe pain, pneumonia, clotting defects, and generalized edema. [note 15] Indeed, I have the sense that the vaccine-related ailments we are presently aware of represent only a very small part of the problem, and that many others will be identified once we take the trouble to look for them. But even the few that have been described make it less and less plausible to suppose that vaccines produce a natural or healthy immunity that lasts for some time but then "wears off," leaving patients miraculously unharmed and unaffected by the experience.

Personal Experiences with Vaccine-Related Illness

I would like to present a few vaccine-related cases, in part to show how varied, chronic, and difficult to trace they can be, but also to begin to address the crucial question that is so rarely asked, namely, how the vaccines actually *work,* and what effects they actually produce inside the human body.

> In January of 1977, I saw an 8-month-old girl for recurrent fever of unknown origin, shortly after her third episode. These were brief but intense, lasting 48 hours at most, but usually reaching 105°F. During one episode she was hospitalized for tests, but her pediatrician found nothing out of the ordinary, and otherwise the child appeared to be quite well and growing and developing normally. The only peculiar thing I could learn from the mother was that all three episodes had occurred almost exactly one month apart, and, on consulting her calendar, that the first one had come just one month after the third and last of her DPT injections, which had also been given at monthly intervals. With the help of these calculations, the mother then also remembered that the child had had equally high fevers within hours of each shot, but the doctor had ignored them as common reactions to the vaccine. On the slender thread of that history with nothing else to go on, I gave the girl a single oral dose of homeopathically diluted DPT vaccine, and she never had another episode and has remained well since.

This case illustrates how homeopathic remedies prepared from vaccines can be used not only to treat but also to confirm the *diagnosis* of vaccine-related illnesses, which, even when strongly suspected, might otherwise be very difficult to substantiate. Secondly, because fever is indeed the commonest known complication of the DPT vaccine and the child remained quite well in between the attacks, her response appeared to be a relatively healthy and vigorous one, disturbing in its recurrence, but quite simple to cure. Indeed, it mainly prompted me to wonder how the vaccine acts in those tens and hundreds of millions of children who show no obvious response to it at all.

Since then I have seen quite a few other cases of children with recurrent fevers of unknown origin associated with a variety of chronic complaints such as irritability, tantrums, and increased susceptibility to tonsillitis, sinusitis, and ear infections that were similarly traceable to the pertussis vaccine and successfully treated with the homeopathic DPT nosode.

> In June of 1978, a 9-month-old girl was brought in with a fever of 105°F. and very few other symptoms. Like the first case, this child had had two such

episodes in the past, but at irregular intervals. Already somewhat ambivalent about giving her any vaccines at all, the parents had belatedly consented to the first DPT, but no more, since the first episode had occurred roughly two weeks afterward. In spite of the usual acute fever remedies and other supportive measures, the temperature held at 104-105° for 48 hours, so I decided to investigate further. The only notable finding was an extremely high white-cell count of 32,000 per cu.mm., of which 25% were neutrophils, many with toxic granulations,43% lymphocytes, 11% monocytes, and 21% young and immature forms. Knowing nothing else about the child, a pediatrician friend to whom I showed the slide immediately recognized it as pertussis. As before, I gave a single oral dose of the homeopathic DPT nosode, and the fever came down abruptly within an hour or so, and the child has remained well since.

This case was disturbing mainly because of the high white count, which was nearing the leukemia range, the abnormal blood picture, and the absence of any cough or respiratory symptoms, which again suggest that introducing the vaccine directly into the blood may in fact promote deeper, more systemic pathology than allowing the pertussis organism to set up typical symptoms of local inflammation at the normal portal of entry.

In August of 1978, one of my teachers, a GP of over 40 years'experience, invited me to see one of his patients, a 5-year-old boywith chronic lymphocytic leukemia, which had first appeared soonafter a DPT vaccination. Though he had treated the child successfully with homeopathic remedies on two previous occasions, with shrinkage of the liver and spleen back almost to normal size and a dramatic improvement in the blood picture, full relapse had occurred both times within a week or two of each successive booster.

That vaccines might somehow be implicated in childhood leukemia was an idea shocking enough in itself, but it also completed the line of reasoning opened up by the previous cases. For leukemia is precisely a cancerous process of the blood and blood-forming organs (liver, spleen, lymph nodes, bone marrow), which are also the principal sites of the immune system. Insofar as the vaccines are able to produce serious effects at all, the blood and the major immune organs are certainly the logical place to begin looking for them.

But perhaps even more shocking to me was the fact that the boy's own parents were so reluctant to make the connection, even when it was staring them in the face and literally threatening their son's life. It was this case that convinced me once and for all of the need for serious discussion of vaccine-related illness, since rigorous experimental proof of these matters will require years of painstaking investigation and a high level of public commitment to back it up that so far has not been made.

Regarding the MMR vaccine, my experience has thus far been limited to a few cases.

In December of 1980 I saw a 3-year-old boy with a month-long history of swollen glands, loss of appetite, indigestion, and stomach aches, the latter often quite severe and accompanied by belching, flatulence, and explosive diarrhea. In addition to nasal congestion and redness of the eyelids, the parents also reported unusual behavior changes, such as extreme untidiness, wild and noisy playing, and waking at 2 a. m. to get into their bed.

> The only remarkable features of the physical examination were several enlarged, tender lymph nodes behind the ear and at the base of the skull, locations favored by rubella, mononucleosis, and a few other infections, and markedly swollen tonsils. This fact reminded the mother that the boy had received the MMR vaccine in October, about two weeks before the onset of his illness, with no apparent reaction to it at the time. Based on this possibility, I gave the child a single dose by mouth of the homeopathic nosode made from the rubella vaccine, and the symptoms disappeared within 48 hours and did not come back.
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> The following April, the parents brought him back for a mild fever and a three-week history of intermittent pain and soreness in and in front of the right ear, with stuffy nose and other vague cold symptoms. Upon examination the whole right side of the face appeared swollen and tender, especially the cheek and the angle of the jaw, and the right eye was also red and congested. Looking abit like a mild case of the mumps, he responded very well to acute remedies and has been in good health since.

First, this boy is a sort of prototype of the ordinary rubella vaccine case: after two weeks, about the same interval as the normal incubation period for rubella, a nondescript illness develops and slowly becomes more severe than the natural disease in the same age group, with sore, swollen, lymph nodes or abdominal or joint pains, for example, but very little rash or fever. If the rubella component is suspected on account of the unusual pattern of lymph node involvement, the diagnosis may be confirmed by a favorable response to the rubella nosode. Even more interesting was the second illness, where parotid involvement suggests a delayed activation of the mumps vaccine component, and thus raises the frightening possibility of "mixed" or composite responses to two, three, or more combined vaccines either simultaneously or over time.

> In April of 1981 I first saw a 4-year-old boy for chronic bilateral soreness and enlargement of the parotids and lymph nodes around and behind the ears, which had begun about a year earlier, when the MMR vaccine was given, and continued with no sign of improvement. Moreover, during that same period he had become much more prone to upper respiratory infections, although they were not particularly severe. Since the mother was two months pregnant and the boy not ill at the time, I was in no hurry to treat him, but not long after the birth he developed acute bronchitis, with recurrent swelling and tenderness of the nodes. After a dose of homeopathic rubella, the acute illness, cough, and swollen glands promptly subsided, but two weeks later he was back with a hard, tender nodule in the right cheek near the angle of the jaw and some pain on chewing or opening the mouth. At that point I gave him the mumps nosode, and he has been well ever since.

As in the first case, the striking feature is the gradual or lingering pattern of the condition, with a definite tendency to become chronic and increased susceptibility to other illnesses and to weak, low-grade reactions in general, in contrast to the vigorous responses typical of acute diseases like measles and mumps when they are acquired naturally.

How Do Vaccines Work?

It is dangerously misleading and indeed the exact opposite of the truth to claim that a vaccine makes us "immune" or *protects* us against an acute disease, if in fact it only drives the infection deeper into the interior and causes us to harbor it *chronically,* with the result that our responses to it become weaker and weaker, and show less and less tendency to heal or resolve themselves spontaneously. To consider that possibility, I will examine the process of coming down with and recovering from a typical acute disease like the measles, in contrast to what we can observe after giving the measles vaccine.

As is well known, measles is primarily a virus of the respiratory tract, both because it is acquired by inhalation of infected droplets in the air, and because these droplets are produced by coughing and sneezing of patients with the disease. Once inhaled by a susceptible person, the virus then undergoes a long period of silent multiplication, first in the tonsils, adenoids, and accessory lymphoid tissues of the nasopharynx, later in the regional lymph nodes of the head and neck, and eventually, several days later, passes into the blood and enters the spleen, the liver, the thymus, and the bone marrow, the visceral organs of the immune system. [note 16] Throughout this "incubation period," lasting from 10 to 14 days, the patient usually feels quite well, and experiences few if any symptoms. [notes 17]

By the time that the first symptoms appear, circulating antibodies are already detectable in the blood, while the height of the symptomatology coincides with the peak of the antibody response. [note 18] In other words, the illness we know as "the measles" is precisely the attempt of the immune system to eliminate the virus from the blood, mainly by sneezing and coughing, i. e., via the same route that it entered in the first place.

Moreover, the process of coming down with and recovering from an acute illness like the measles involves a general mobilization of the entire immune system, including

1) inflammation of previously sensitized tissues at the portal of entry;

2) activation of white cells and macrophages that find and destroy the foreign elements;

3) release of special serum protein fractions to expedite these operations;

and numerous other mechanisms, of which the production of specific antibodies is only one, and by no means the most important.

This splendid outpouring leaves little room for doubt that acute illnesses are in fact the decisive experiences in the normal, physiological maturation of the immune system as a whole. For not only will children who recover from the measles never again be susceptible to it; [note 19] such an experience must also prepare them to respond even more promptly and effectively to whatever other infections they may acquire in the future. Indeed, the ability to mount a vigorous, acute response to organisms of this type must be reckoned among the fundamental requirements of general health and well-being.

In contrast, when the artificially attenuated measles virus is injected directly into the blood, it bypasses the normal portal of entry, producing at most a brief, mild inflammatory reaction at the injection site, but no incubation period, no local sensitization, no real possibility of eliminating it via the same route, and no generalized immune response to prime the immune system in the future. Indeed, by cheating the body in this fashion, we have accomplished precisely what the evolution of the immune system seems to have been designed to prevent: we have introduced the virus directly into the blood and given it free, immediate access to the major immune organs without any obvious way of getting rid of it.

To be sure, we have also achieved the production of specific antibodies against the virus, which can be measured in the blood, but now only as an isolated technical feat, with no massive outpouring and no general improvement in the health of the organism. Indeed, I fear, exactly the opposite is true: the exorbitant price we have to pay for these antibodies is for the maintenance of the virus in the cells of the immune system for prolonged periods of time, maybe permanently, which in turn presupposes a generalized weakening of our capacity to mount an effective response not only to measles, but to other acute infections as well.

Far from producing a genuine immunity, then, I fear that vaccines act by *suppressing* or interfering with the immune response as a whole, as radiation, chemotherapy, steroids, and other anti-inflammatory drugs do. Artificial immunization isolates antibody production, a single aspect of the immune process, and allows it to stand for the whole, in somewhat the same way that chemical suppression of an elevated blood pressure is taken as a valid substitute for healing the patient whose blood pressure happens to be elevated. My suspicion is that vaccines also make it more difficult to mount a vigorous, acute response to infection in general, by substituting a much weaker *chronic* response with little or no tendency to heal itself spontaneously.

Moreover, adequate models already exist to predict and identify the types of chronic disease that are likely to result from viruses and other foreign proteins remaining permanently within the cells of the immune system. It has been known for decades that live viruses, for example, can remain latent for years within the host cells without continually or indeed ever provoking acute disease. In most cases, this is achieved by attaching their own genetic material as an extra particle or "episome" to that of the host cell and reproducing along with it, allowing the host cell to continue its normal functions for the most part, provided it follows encoded instructions to synthesize viral proteins at the same time. [note 20]

Latent viruses have already been implicated in three distinct kinds of chronic disease, namely,

1) *recurrent acute diseases,* such as herpes, shingles, warts, etc.; [note 21]

2)*"slow-virus" diseases,* which are subacute or chronic, usually progressive, and often fatal, such as kuru, Creuzfeldt-Jakob disease, subacute sclerosing panencephalitis (SSPE), and perhaps Guillain-Barré syndrome; [note 22] and

3) some *tumors,* both benign and malignant. [note 23]

In all of these forms, the latent virus survives as a foreign element within the target cell, so that the immune system must continue to make antibodies against it to the extent that it can still respond to it at all; but with the virus permanently integrated into the genetic material of the host cell, these antibodies will now have to be directed against the cell itself. The persistence of live viruses and other foreign antigens within the host thus cannot fail to provoke *autoimmune phenomena,* because destroying the infected cells is now the only possible way for this constant antigenic challenge to be removed from the body. Since routine vaccination introduces live viruses and other highly antigenic material into the bloodstream of virtually every living person, it is difficult to escape the conclusion that a significant harvest of autoimmune diseases must surely result.

As Sir Macfarlane Burnet observed many years ago, the various components of the immune system all work together as if designed to help the organism to distinguish "self" from "non-self," i. e., to help us recognize and tolerate our own cells while identifying and eliminating foreign substances and life forms as completely as possible. [note 24] As the most familiar examples he cites our ability not only to mount an acute response to infection, but also to reject transplanted tissues or "homografts" from others of the same species, both of which achieve complete and permanent removal of the offending substance from the organism.

If he is correct, then latent viruses, autoimmune phenomena, and cancer evidently represent simply different aspects of the same basic dilemma, which the immune system cannot escape or resolve. For all of them exemplify varying degrees of *chronic immune failure,* states in which it becomes equally difficult for the immune system to recognize its cells as unambiguously its own and to eliminate its parasites as unequivocally foreign.

In the case of the measles vaccine, for example, introducing the attenuated live virus directly into the blood may well provoke an antibody response to it for a considerable period of time, which is the whole point of giving it, after all. But once the virus becomes latent in the cell, the serum concentration of circulating antibodies is very likely to wane, because they seldom cross the cell membrane and are also powerfully immunosuppressive in their own right. [note 25] Indeed, the probable effect of circulating antibody after that would only be to keep the virus confined within cells and thus prevent any acute inflammatory response to it, until eventually, perhaps under cumulative stress or emergency circumstances, this precarious balance collapses, and antibodies are produced in large numbers against the cells, resulting in tissue destruction and other autoimmune phenomena. In this sense, latent viruses are like biological "time bombs," set to explode at an indeterminate time in the future. [note 26]

Autoimmune diseases have always seemed obscure, aberrant, and bizarre because nobody has ever proposed a valid reason why living organisms would suddenly begin to attack and destroy their own tissues. They make a lot more sense, and must indeed be reckoned as "healthy," if destroying chronically infected cells is the only way to eliminate their persistent and even more serious threat to life.

If that is true, then tumor formation could also be understood as simply another more advanced stage of chronic immune failure, as the host, weakened by the strain of attempting to make antibodies against itself, gradually becomes less and less able to withstand it, and eventually the chronically infected and genetically transformed

cells, no longer unequivocally "self" or "non-self," begin to free themselves from the normal restraints of "histocompatibility" within the architecture of the surrounding tissues and to multiply more or less autonomously at their expense. Tumors might then be described as "benign" insofar as the loss of histocompatibility remains strictly limited to their cell type or tissue of origin, and "malignant" to the extent that it spreads to other cell types, tissues, and organs, and even more remotely to other areas in the body.

In any case, if these speculations turn out to be accurate, the net effect of artificial immunization will have been merely to trade off the acute, epidemic diseases of past centuries for the weaker but far less curable chronic diseases of today, whose accumulated suffering and disability continue to appreciate through life, like a high-interest mortgage loan. In the process, we have also introduced limitless new evolutionary possibilities for the future of ongoing *in vivo* genetic recombination within the cells of the race.

The Individual Vaccines Reconsidered

While the foregoing was addressed to the vaccination process in general, the equation looks a bit different for each of the vaccines and diseases in question and merits separate consideration.

Currently administered as a single intramuscular injection at 15 months of age, the triple MMR vaccine is composed of attenuated, live measles, mumps, and rubella viruses. Boosters are recommended only for women of childbearing age, when the risk of congenital rubella syndrome is thought to warrant it, although the effectiveness of the repeat dose is highly questionable.

Before the vaccine era, all three diseases were contracted by most schoolchildren before the age of puberty, of whom the vast majority recovered completely, with lifelong immunity and no complications. But they were not always so harmless. Measles, in particular, can devastate a population encountering it for the first time. Carrying it with them into Mexico undoubtedly contributed to the Spaniards' conquest of the Aztec Empire, in which entire villages were decimated by epidemics of smallpox and measles, leaving only small remnants of cowed and weakened survivors to face the bearded horsemen from across the sea. [note 27] In more recent outbreaks among isolated, primitive peoples, the death rate among measles cases averaged 20 to 30%.[note 28]

In most of these "virgin-soil" epidemics, not only measles but also polio and other similar diseases exact their highest toll of death and serious complications among adolescents and young adults in the prime of life, leaving relatively unharmed the group of school-age children before the age of puberty. [note 29] This means that the evolution of a disease like measles from a dreaded killer to a routine disease of childhood is accomplished by the development of "herd" immunity in young children, such when exposed they can activate nonspecific defense mechanisms already in place, resulting in the prolonged incubation period and isially benign, self-limited course described above.

Under these circumstances, the rationale for vaccinating young children against measles is simply that a very small number of deaths and serious complications still occur, mainly pneumonia, encephalitis, and the rare but dreaded subacute sclerosing

panencephalitis (SSPE), a "slow-virus" form of the disease with a reported incidence of 1 in every 100,000 cases. [note 30] Pneumonia, by far the commonest complication, is for the most part benign and self-limited, [note 31] and even bacterial pneumonia developing on top of it can be treated effectively.

Now that the death rate from the disease has become so low, the risk of serious complications so minor, and the benefit to kids recovering from it so great, the vaccine, even if it reduced these risks still further, would not be worth the high probability of autoimmune diseases, cancer, and whatever else may result from the propagation of latent measles virus in human tissue culture for life. Ironically, what it has already done is to reverse the natural evolutionary process back to its point of origin, where the disease is seen once again primarily in adolescents and young adults, [note 32] and results in more complications and a usually nastier and more disabling clinical course than it does in younger children.

As for the claim that the vaccine has helped to eliminate measles encephalitis, in my own small general practice I have already seen two children with major seizure disorders which the parents were quite certain had arisen from bad reactions to the measles vaccine, alhough they would never have been able to prove the connection in a court of law and had never even considered the possibility of compensation. Such cases are never included in the official statistics and are therefore routinely omitted from most surveys of the problem. Indeed, merely injecting the virus into the blood would naturally promote the development of visceral complications involving the lungs, liver, and brain, for all of which measles has a known affinity.

Similarly, the case for immunizing against mumps and rubella seems even more tenuous, for exactly the same reasons. When contracted by children before the age of puberty, it too is a benign, self-limiting disease, recovery from which almost always confers lifelong immunity. The principal complication is meningoencephalitis, of which mild or subclinical forms are not uncommon, but the death rate is extremely low, as is the risk of serious or permanent impairment. [note 33]

The mumps vaccine is prepared and administered in exactly the same way as the measles, usually in the same injection, and the dangers associated with it are likewise comparable. Unfortunately, as a result of vaccination it too has become largely a disease of adolescents and young adults, [note 34] age groups which tolerate it much less well. Its commonest and most notorious complication is acute epididymoorchitis, which occurs in 30 to 40% of males affected past the age of puberty, and usually results in atrophy of the testicle on the affected side, [note 35] but the virus has shown a predisposition to attack the ovary and pancreas as well. The greatest favor we could do for our children would be to expose them to measles and mumps when they are six or seven, which would not only protect them from contracting more serious forms of these diseases when they grow older, but also assist their immunological maturation with minimal risk. It almost goes without saying that this is very close to the actual historical evolution of these illnesses before the MMR was introduced.

The same discrepancy is evident in the case of rubella, or "German measles," which in young children is an illness so mild that it often goes undetected, [note 36] while in adolescents and young adults it is more apt to be associated with arthritis, purpura, and other signs of deeper involvement. [note 37] The sole impetus for developing a vaccine was the recognition of congenital rubella syndrome, involving

viral damage to the developing embryo *in utero* during the first three months of pregnancy, [note 38] and the peak of CRS incidence traceable to the rubella outbreak of 1964. Once again, mandatory vaccination has transformed an almost entirely benign, self-limiting illness into a considerably nastier disease among teenagers and young adults of reproductive age, precisely the group that most needs to be protected from it. By far the most effective way to prevent CRS would be simply to expose our children to rubella in grade school: reinfection does sometimes occur, but much less commonly than after vaccination. [note 39]

In the case of diphtheria and tetanus, the equation looks rather different. First, both diseases are serious and at times fatal, even with the finest treatment: this is especially true of tetanus, which still carries a mortality rate of 20 to 50%. Second, both vaccines are prepared not with living diphtheria and tetanus organisms, but only from poisonous substances elaborated by them, which remain highly antigenic even when inactivated by heat, and protect not against infection *per se,* but against the systemic effect of these toxins, without which both infections would be of minor significance.

It is easy to understand why parents would want to protect their children against these diseases, if safe and effective vaccines were available, and since both diphtheria and tetanus toxoid have been in use for a long time, with a very good safety record on the whole, there has never been much public outcry against them. On the other hand, both diseases are readily controlled by good sanitation and careful attention to wound hygiene, and both have been disappearing rapidly from the developed world since long before the vaccines were introduced.

Diphtheria still occurs sporadically in the United States, often in areas with significant reservoirs of unvaccinated children, but the toxoid is not very protective once the disease actually breaks out, "susceptibles" being no more likely to come down with it than their fully immunized classmates. Thus in the Chicago outbreak of 1969, 25% of the cases had been fully immunized; 12% had received one or more doses of toxoid and serologically tested as fully immune; and 18% tested partly immune by the same criteria. [note 40] So once again we must face the probability that the toxoid has produced not a genuine immunity to the disease, but rather some sort of chronic immune *tolerance* to it, by harboring highly antigenic residues somewhere within the cells of the immune system, with probable long-term suppressive effects on the immune mechanism in general. This risk is further compounded by the fact that all three of the DPT vaccines are alum-precipitated and preserved with Thiomersal, an organomercury compound, to retard their metabolic breakdown and excretion, so that the antigenic challenge they pose will continue for as long as possible. The truth is that we do not know and have never even attempted to discover what actually becomes of these foreign substances inside the human body.

Precisely the same difficulties complicate the generally favorable record of tetanus toxoid, which has clearly had at least some impact on the decline of this dreadful disease in its classic form, yet presumably also survives in the body for years or decades as a potent foreign antigen, with long-term effects on the immune system and elsewhere that as yet we can only imagine.

Like diphtheria and tetanus, whooping cough as a public health threat had already begun to decline precipitously well before the pertussis vaccine was introduced. Moreover, the latter has not been very effective, as even its proponents concede,

and both the extent and the severity of its side effects have been disturbingly high. Its power to damage the central nervous system, for example, has received increasing attention since Stewart and his colleagues reported an alarmingly high incidence of encephalopathy and serious convulsive disorders in British children that were directly traceable to the pertussis vaccine. [note 41] My own cases, of which a few were reported earlier, suggest that hematological disturbances may be equally prevalent. In any event, the complications that are *known* clearly represent only a small fraction of the total, and the vaccine has become controversial even in the United States, where medical opinion has remained virtually unanimous in favor of vaccines generally, while several other countries, such as West Germany, have discontinued it as a routine practice. [note 42]

Clinically, whooping cough is extremely variable in severity, ranging from asymptomatic, mild, or in apparent infections, which are quite common, to very rare and sometimes fatal cases in young infants less than 5 months old, in whom the mortality is said to approach 40%.[note 43] In children over a year old, it is rarely fatal or even all that serious, and antibiotics have little to do with the outcome. [note 44]

Much of the pressure to immunize at present must therefore be ascribed to the higher death rate in young infants, which has led to the terrifying practice of giving this most dangerous of vaccines to babies at 2, 4, and 6 months, when their mothers' milk could have protected them from all infections about as well as it can ever be done, [note 45] and its effect on the developing blood and nervous systems could well be catastrophic. For all of these reasons, the practice of mandatory immunization against pertussis should be discontinued immediately, and studies undertaken to assess and compensate the damage that it has already done.

Poliomyelitis and the two main polio vaccines present an entirely different situation. The standard Sabin vaccine is trivalent, consisting of attenuated live polio viruses of each of the three strains associated with paralytic disease, and seems quite safe, partly because it is administered orally, the same way the infection is acquired, thus allowing recipients to develop a kind of natural immunity at the normal portal of entry, the GI tract.

On the other hand, the wild-type poliovirus elicits no symptoms of any kind in over 95% of the people exposed to it, even under epidemic conditions, [note 46] and only 1 or 2% of those who become symptomatic ever progress to the neurological picture of poliomyelitis, with its destructive lesions in the motor tracts of the spinal cord and medulla oblongata. [note 47] Poliomyelitis thus cannot develop without a particular anatomical susceptibility in the host. Even in the full-scale epidemics of the 1950's, the attack rate of the poliovirus remained very low, and the number of cases resulting in death or permanent impairment remarkably small, in comparison with the huge number of people exposed and at risk for it. [note 48]

Since the virus was more or less ubiquitous in the pre-vaccine era, and could be found routinely in samples of city sewage wherever it was looked for, [note 49] effective natural immunity to it was already about as close to being universal as it could ever be, and it remains highly doubtful if any artificial substitute could equal or even approximate that result. Indeed, because the virulence of the wild-type virus was so low to begin with, it is difficult to see what further attenuation of it could possibly accomplish other than weaken the natural vigor of the immune response at

the same time. For the fact remains that even the attenuated virus is still alive, and the people who were anatomically susceptible to the wild type are presumably still susceptible to it now, so that some of them will develop paralytic disease from the vaccine, [note 50] while others may continue to harbor the virus in latent form, perhaps within the same target cells.

Seemingly the only advantage of giving the vaccine, then, would be to introduce the virus during infancy, when its virulence would normally be lowest anyway, [note 51] a benefit more than offset by the risk of weakening the immune response, as above. In any case, even for the polio vaccine, which is about as safe as any vaccine can ever be, the whole matter is clearly one of enormous complexity, and well illustrates the hidden pitfalls and miscalculations inherent in the temptation to beat nature at her own game, by trying to eliminate a problem that can't be eliminated, namely, the susceptibility to disease itself. Perhaps the day may come when we can face the consequences of having fed live viruses to babies by the hundreds of millions, and can admit that we should have left well enough alone by addressing the art of healing the sick when we have to, instead of the technology of erasing the *possibility* of sickness when we don't have to and can't possibly succeed in any case.

Vaccination and the Path of Medical Technology

In conclusion, I want to go back to the essentially political aspects of the vaccine question, to our common obligation as citizens in a democratic polity to reason and deliberate together about matters of mutual concern and to reach a clear and wise decision about how we choose to live. Now that I have stated my views on the safety and effectiveness of the usual childhood vaccines, I hope that others of differing views will come forward and do the same. That is why I am deeply troubled by the air of fanaticism in which vaccines are imposed on the public and serious discussion of them is ignored or stifled by the medical authorities as if the question had already been settled definitively and for all time. In the words of Sir Macfarlane Burnet,

> It is our pride that in a civilized country the only infectious diseases that anyone is likely to suffer are either trivial or easily cured by available drugs. The diseases that killed in the past have been rendered impotent, and general principles of control have been developed that should be applicable to any unexpected outbreak in the future. [note 52]

Apart from the truth or falseness of these claims, they exemplify the smug self-righteousness of a profession that worships its power to manipulate and control Nature itself, and of a society in which, as Robert Mendelsohn has said, "we are quick to pull the trigger, but slow to examine the consequences of our actions." [note 53] Indeed, in the case of vaccines, one would have to say *methodically* slow. In 1978, for example, when charged by Congress to formulate guidelines for Federal compensation of "vaccine-related injuries," the American Academy of Pediatrics issued the following restrictions on eligibility:

1) Compensation should be made available to any child or young person under the age of 18 years, or a contact of such person of any age, who suffers a major reaction to a vaccine mandated for school in his or her state of residence.

2) *Such a reaction should have been previously recognized as a possible consequence of the vaccine given.*

3) *Such a reaction should have occurred no more than 30 days following the immunization.* [note 54]

These restrictions would automatically exclude all of the chronic diseases and anything other than the very few adverse reactions that have been identified and documented thus far, which clearly represent only a small fraction of the problem.

Nor can the government or medical establishment be considered ignorant of the possibility that worries every parent, that vaccines cause cancer and other chronic diseases. Precisely that spectre was raised by Prof. Robert Simpson of Rutgers in a 1976 seminar for science writers:

> Immunization programs against flu, measles, mumps, polio, and so forth may actually be seeding humans with RNA to form latent proviruses in cells throughout the body. These latent proviruses could be molecules in search of diseases: when activated under proper conditions, they could cause a variety of diseases, including rheumatoid arthritis, multiple sclerosis, systemic lupus, Parkinson's disease, and perhaps cancer. [note 55]

Unfortunately, this is the sort of warning that very few people are willing or able to take seriously at this point, least of all the American Cancer Society or the American Academy of Pediatrics. As René Dubos has said, we all want to believe in "the miracle," regardless of the evidence:

> Faith in the magical power of drugs often blunts the critical senses and comes close to a mass hysteria at times, involving scientists and laymen alike. Men want miracles as much today as in the past. If they do not join one of the newer cults, they satisfy this need by worshipping at the altar of modern science. This faith in the magical power of drugs is not new. It has helped to give medicine the authority of a priesthood, and to recreate the glamor of ancient mysteries. [note 56]

The idea of eradicating measles or polio has become attractive to us simply because the power of medical science makes it seem technically *possible:* we worship every victory of technology over Nature, just as the bullfight celebrates the triumph of human intelligence over the brute beast. That is why we do not begrudge the drug companies their exorbitant profits and gladly volunteer the bodies of our children for their latest experiments. Vaccination is essentially a religious sacrament of our own participation in the miracle of medical science, a veritable *auto-da-fé* in the name of modern civilization itself.

Nobody in their right mind would seriously entertain the idea that if we could somehow eliminate one by one measles and polio and all of the known diseases of mankind, we would really be any the healthier for it, or that other diseases at least as terrible would not quickly take their place. Still less would a rational being imagine that the illnesses from which we suffer are "entities" separable from the individuals who suffer them, or that with the appropriate chemical or surgical sacrament the separation can literally be carried out. Yet these are precisely the miracles we are taught to believe in and the idolatries to which we in fact aspire. We prefer to forget the older and simpler but more difficult truths, that the susceptibility to illness is deeply rooted in our biological nature, and that the signs and symptoms of disease

are the attempt of our own life energy to overcome whatever we are trying to overcome, trying, in short, to *heal* ourselves.

The myth that we can find technical solutions for all human ailments looks attractive at first precisely because it bypasses the problem of healing, which is a genuine miracle in the sense that it can always *fail* to occur. We are all truly at risk of illness and death at every moment; no amount of technology can change that. Yet the mission of technical medicine is precisely to try to change that, by standing always in the front line against disease, and by attacking and destroying it wherever and whenever it shows itself.

That is why, with all due respect, I cannot accept the sacraments of Merck, Sharp & Dohme or have faith in the miracles of the Centers for Disease Control. For myself, I prefer to stay with the miracle of life itself, which has given us not only illness and disease but also the arts of medicine and healing, through which we can acknowledge our pain and vulnerability and at times, with the grace of God and the help of our fellow humans, experience a sense of health and well-being that goes beyond tribe or country. That is *my* religion, and though I will gladly share it, I do not force it on anyone.

Postscript on Immunizations: Directions for Future Research

In "The Case Against Immunizations," my intention was simply to understand my own experience, to develop a coherent and plausible line of reasoning that could make sense out of what I had read and thought about, and out of what my patients were telling me. [note 57] The next step is to address the issue of *experimental verification,* to try to sketch out how to look for valid and repeatable evidence for the safety, efficacy, and mode of action of the common vaccines.

In rereading my article, I was surprised to discover that even the more speculative ideas in it could in fact be tested quite easily, using only the standard research techniques now in common use, which naturally makes me even more curious why such studies were not carried out long ago. Moreover, as I indicated in the text, a number of investigators have already entertained these ideas and even made them public. The obvious reason why they have not been taken seriously is that they are heretical, that even taking the time to study them would require a "paradigm shift" of some magnitude. [note 58]

How Effective Are the Vaccines?

In the text I argued that, if vaccines act by *suppressing* the immune system's normal capacity to mount an acute response to infection, then

1) a mere drop in the incidence of the acute disease can no longer be accepted as a measure of true immunity; and

2) neither can the presence or concentration of specific antibodies, for the same reason as the diseases in question continue to break out even in serologically highly immune populations.

What would be a far more interesting and relevant measurement would be the degree to which a vaccine protects against the acute disease when it actually does break out, which could be readily ascertained by looking at its attack rate and severity among those fully or partly "immunized," as compared with their unvaccinated friends and neighbors. Although saying nothing about the possibility of immunosuppression, such a study would at least give a truer measure of the vaccine's power to do what its proponents want them to do.

I cannot resist pointing out that all research of this kind requires a sizable group of unimmunized people, courtesy of the same parents who are refusing to vaccinate their kids despite the concerted efforts of the medical and public health authorities to intimidate and punish them. The same result could of course be achieved far more efficiently simply by making the vaccines optional, as they are in West Germany, Sweden, the UK, and other developed countries, and thus allowing the experimental and control groups in effect to select themselves. Conversely, our frantic efforts to secure 100% compliance with the present mandate succeed only in making such studies impossible.

A closely related kind of study would be to measure the effectiveness of *revaccination* at varying intervals after the original series, giving rise in this case to two control groups:

1) the same unvaccinated group, as before, and

2) another group of children previously vaccinated whose parents decided not to give them the subsequent booster dose.

Such a study would also measure the incidence and severity of the wild-type or acute disease when it does break out, rather than merely the titer or level of circulating antibody, which is probably far less relevant. On the basis of the preliminary investigations I cited in the text, my hunch is that both the primary and booster doses of vaccine give considerably less protection in these situations than either a simple drop in incidence or a rise in antibody titer would indicate. Furthermore, both kinds of study could easily be carried out in suitable animal populations, using vaccines against important diseases peculiar to each species, like canine distemper, leptospirosis, feline leukemia, and so forth, inasmuch as our basic concern remains the efficacy and mode of action of vaccines in general.

The third possibility would be to consider the relationship between specific antibody levels and "immunity" in the larger sense, as outlined above. This could be done relatively simply by measuring baseline antibody titers at regular intervals in everybody, and then retrospectively comparing them in a subgroup of vaccinated kids who later developed the disease with another comparable subgroup who did not. Finally, both could be compared with identical subgroups among the unvaccinated, all or most of whom would presumably show no measurable titers at all prior to exposure.

How Do the Vaccines Act?

As I argued in the text, the problem with such studies is that they all systematically ignore the crucial possibility that vaccines may also act immunosuppressively and thus provoke or elicit a variety of chronic diseases more or less insidiously over long

periods of time. This is precisely why the question of their effectiveness ultimately cannot be studied in isolation, without also addressing their mechanism of action in a more comprehensive fashion. Indeed, the narrow issue of "effectiveness" is itself quite misleading, since it tends to focus our attention on the classic acute disease, and to ignore the broad spectrum of biological responses associated with bacteria, viruses, and the vaccines derived from them, including latent, subclinical, and chronic infection as well. In particular, we are already well acquainted with many situations in which inability to develop acute disease represents the exact opposite of good health, i. e., a condition of chronic immune *tolerance* rather than true immunity.

At the most basic level, we need to study the effect of vaccines both acutely and over the long term on various paramaters of general health and illness. In the case of the pertussis vaccine, for example, careful prospective studies could measure the incidence and severity of blood and CNS abnormalities after vaccination at the usual times and at standard intervals before and after. This could be done relatively inexpensively by performing complete blood counts (CBC's), brief neurological exams, and simple behavioral and psychological assessments on self-selected groups of vaccinated and unvaccinated children.

As a supplement to the above, a number of clinical variables could also be followed at the time of "well-child" and other pediatric visits, such as the incidence and severity of important childhood illnesses like URI's, tonsil, throat, sinus, and ear infections, growth and developmental retardation, swollen glands, and the like, in vaccinated and unvaccinated kids over a period of years. The same format would also make it possible to sort out patterns of morbidity peculiar to each particular vaccine. Once again, the crucial importance of large groups of unvaccinated subjects is evident. With regard to pertussis, my clinical experience so far strongly suggests that the vaccinated group would show a much higher incidence and morbidity from chronic and recurrent infections, with significantly higher rates of complications and disability (myringotomy, hearing loss, poor school performance, etc.).

Finally, the same children could be followed through latency and adolescence to ascertain the prevalence and severity of the whole gamut of chronic ailments, including eczema and asthma, rheumatoid arthritis and systemic lupus, ulcerative colitis and Crohn's disease, MS and other degenerative diseases, hyperactivity and learning disabilities, school and behavior problems, and leukemia and other forms of cancer. I hope I'm wrong, but once again my clinical impression suggests that the vaccinated group would fare significantly worse in all of these categories.

Another more limited study could trace the effect of vaccines on the prevalence and morbidity of other acute infections to which these same children were exposed (influenza, hepatitis, mono, Lyme disease, etc.), to determine whether and to what extent the vaccination process interferes with the immune system's ability to develop an acute response to infection. In this case, there would be two control groups:

1) unvaccinated kids who were later exposed to influenza, hepatitis, mono, and the like; and

2) unvaccinated kids who contracted and recovered from vaccine-preventable diseases (measles, mumps, or whatever) prior to their exposure to influenza, mono, hepatitis, etc.

Here I could simply confess a theoretical *bias* that both control groups, while perhaps as likely to *contract* the diseases in question, would show less acute and chronic morbidity as a result of it than their vaccinated counterparts, a bias for which I would gladly substitute more accurate information.

It would also be comparatively simple to design acceptable animal studies along these same lines, to consider the possibility of vaccines acting immunosuppressively. After vaccinating or not vaccinating a given species against the diseases routinely targeted for that animal, we could then measure, for example, leucocyte and macrophage activity both *in vivo* and *in vitro* in response to various challenges, such as exposure to unrelated infections, allergens, and chemicals. Other possibilities might include comparing standard liver-function tests and the ability of the spleen and bone marrow in both vaccinated and unvaccinated animals to reject homografts or to respond to hemorrhage or blood transfusion if necessary.

Finally, on the cellular level, cytogenetic studies could also show the effect of vaccination on karyotype and chromosome morphology, beginning with "target" cells for which the vaccine has a known affinity (e. g., liver parenchymal cells in hepatitis, parotid acinar cells in mumps, etc.). With the help of electron microscopy, painstaking examination could also detect the presence of viral DNA or RNA "episomes" or particles inside these same cells, and confirm the suspicion of latency and chronic infection in the case of the live vaccines at least.

In any case, regardless of *which* studies are actually carried out, the point is that the technology to do them already exists. The only obstacle to their being done is our own refusal to acknowledge the likelihood that vaccines are not simply "wonder drugs" producing specific antibodies and nothing more, but complex, biological agents whose effects on the human organism are virtually unknown and urgently need to be investigated.

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